

Rec'd PCT/PTO 20 JUN 2005

PTO/SB/01 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**



Declaration
Submitted
With Initial
Filing

OR



Declaration
Submitted after Initial
Filing (surcharge
(37 CFR 1.16 (e))
required)

Attorney Docket Number

42965-P041US

First Named Inventor

Jas Pal Singh Badyal

COMPLETE IF KNOWN

Application Number

Filing Date

September 23, 2004

Art Unit

not yet assigned

Examiner Name

not yet assigned

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

PREPARATION OF SUPERABSORBENT MATERIALS BY PLASMA MODIFICATION

(Title of the Invention)

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

September 23, 2004

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Num ()	Country	Foreign Filing Date (M /DD/YYYY)	Priority Not	Certified Copy Attached?	
				Yes	No
PCT/GB2003/001220 0206932.6	PCT	24 March 2004	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	GB	23 March 2002	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Express Mail Label
No. EV 507 271 545 US

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input checked="" type="checkbox"/> Customer Number: <u>43167</u>		OR <input type="checkbox"/> Correspondence address below	
Name Winstead Sechrest & Minick P.C.			
Address P.O. Box 50784			
City Dallas		State Texas	ZIP 75201
Country US	Telephone 214.745.5370	Fax 214.745.5390	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.			
NAME OF SOLE OR FIRST INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any]) <u>Jas Pal Singh</u>		Family Name or Surname <u>BADYAL</u>	
Inventor's Signature <u>Jas Pal Singh</u>		Date <u>24th May 2005</u>	
Residence: City <u>Wolsingham</u>	State County <u>Durham</u>	Country GB <u>GBX</u>	Citizenship GB
Mailing Address Redgate House, Wolsingham			
City County Durham	State	ZIP DL13 3HH	Country GB
NAME OF SECOND INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any]) <u>Wayne Christopher Edward</u>		Family Name or Surname <u>SCHOFIELD</u>	
Inventor's Signature <u>Way- Schofield</u>		Date <u>24-5-05</u>	
Residence: City <u>Marlston-cum-Lache</u>	State <u>Chester</u>	Country GB <u>GBX</u>	Citizenship GB
Mailing Address 23 Downsfield Road			
City Marlston-cum-Lache	State Chester	ZIP CH4 8HH	Country GB
<input type="checkbox"/> Additional inventors or a legal representative are being named on the _____ supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.			

Rec'd PTO 20 JUN 2005

PTO/SB/81 (06-03)

Approved for use through 11/30/2005. OMB 0651-0035

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**POWER OF ATTORNEY
and
CORRESPONDENCE ADDRESS
INDICATION FORM**

Application Number	
Filing Date	September 23, 2004
First Named Inventor	Jas Pal Singh Badyal
Title	Preparation of Superabsorbent ... Modification
Art Unit	not yet assigned
Examiner Name	not yet assigned
Attorney Docket Number	42965-P041US

I hereby appoint:



Practitioners at Customer Number:

43167

OR



Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:



The above-mentioned Customer Number:

OR



The address associated with Customer Number:

OR

<input type="checkbox"/> Firm or Individual Name	Winstead Sechrest & Minick P.C.				
Address	P.O. Box 50784				
Address					
City	Dallas	State	Texas	Zip	75201
Country	US				
Telephone	214.745.5400	Fax	214.745.5390		

I am the:



Applicant/Inventor.



Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Name	Jas Pal Singh Badyal		
Signature	<i>Jas Pal Singh Badyal</i>		
Date	24th May 2005	Telephone	

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.



*Total of 2 forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Express Mail Label
No. EV 507 271 545 US

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM	Application Number	
	Filing Date	September 23, 2004
	First Named Inventor	Jas Pal Singh Badyal
	Title	Preparation of Superabsorbent ... Modification
	Art Unit	not yet assigned
	Examiner Name	not yet assigned
	Attorney Docket Number	42965-P041US

I hereby appoint:

☒ Practitioners at Customer Number:

43167

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☒ The above-mentioned Customer Number:

OR

☐ The address associated with Customer Number:

--

OR

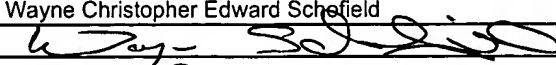
<input type="checkbox"/> Firm or Individual Name	Winstead Sechrest & Minick P.C.				
Address	P.O. Box 50784				
Address					
City	Dallas	State	Texas	Zip	75201
Country	US				
Telephone	214.745.5400	Fax	214.745.5390		

I am the:

☒ Applicant/Inventor.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Name	Wayne Christopher Edward Schofield		
Signature			
Date	24-5-05	Telephone	

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of 2 forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Express Mail Label
No. EV 507 271 545 US

Rec'd PCT/PTO 20 JUN 2005
Rec'd PCT/PTO 20 JUN 2005

PTO/SB/96 (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Badyal, et al.

Application No./Patent No.: _____ Filed/Issue Date: September 23, 2004

Entitled: Preparation of Superabsorbent Materials by Plasma Modification

University of Durham, a

University

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or

2. ☐ an assignee of less than the entire right, title and interest.

The extent (by percentage) of its ownership interest is _____ %
in the patent application/patent identified above by virtue of either:

A. [] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

B. [✓] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: Jas Pal Singh Badyal To: University of Durham

The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: Wayne Christopher Edward Schofield To: University of Durham

The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

[] Additional documents in the chain of title are listed on a supplemental sheet.

[✓] Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

2 JUNE 2005

Date

44 - 191 - 3341011

Telephone number

MS. P. LUBACZ

Typed or printed name

X P. Lubacz X

Signature

TREASURER

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Express Mail Label
No. EV 507 271 545 US

ASSIGNMENT

WHEREAS, the undersigned inventor(s), hereinafter called the "Assignor", has invented a new and useful invention entitled:

**PREPARATION OF SUPERABSORBENT MATERIALS BY PLASMA
MODIFICATION**

_____ for which reference a full description is here made in an application for Letters Patent of the United States filed herewith.

XX for which reference a full description is here made in an application for Letters Patent of the United States Serial No. _____ filed September 23, 2004.

WHEREAS, UNIVERSITY OF DURHAM, A University having a principal office and place of business at Old Shire Hall, Old Elvet, Durham City, DH1 3HP, Great Britain. hereinafter called the "Assignee", is desirous of acquiring the entire right, title and interest in and to said invention, the application above identified, and in, to and under Letters Patent which may be obtained for said invention, as hereinafter more fully set forth;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for valuable and legally sufficient consideration, the receipt of which by the Assignor from the Assignee is hereby acknowledged, the Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in and to the invention and the application herein above identified, and all Letters Patents that may issue for the said invention, and all divisions, reissues, substitutions, continuations, and extensions thereof, to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns to the full end of the term for which any and all of said Letters Patents for the said invention may issue.

FURTHER, be it known that the Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto the Assignee, its successors and assigns, the entire foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

And the Assignor does hereby covenant and agree, for himself and his legal representatives, that they will assist the Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the Assignee may elect to make covering the invention herein identified, as herein before set forth, including any application for reissue, application for reexamination, application for foreign patent rights, or any proceeding in the United States Patent and Trademark Office affecting the invention, investing in the Assignee exclusive title in and to all such other applications and

Letters Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Letters Patents herein contemplated; that they will promptly execute and deliver to the Assignee any and all additional papers and make all lawful oaths which may be requested by the Assignee to fully carry out the terms of this assignment; and further that they will communicate to Assignee, or to its successors, assigns, and legal representatives, any facts known respecting said invention, and at the expense of the Assignee, testify in any legal proceedings, and generally do everything possible to aid the Assignee, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent to the Assignee in accordance with the terms of the assignment.

IN TESTIMONY WHEREOF, the Assignor has hereunto set his hands on the date indicated below.

JAS PAL SINGH BADYAL

Dated: 24th May 2005

Jas Pal Badyal

WAYNE CHRISTOPHER EDWARD SCHOFIELD

Dated: 24-5-05

Wayne Schofield

20 JUN 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Badyal, et al.

Serial No:

Filing Date: September 23, 2004

Group Art Unit: Not yet assigned

Title: PREPARATION OF SUPERABSORBENT MATERIALS
BY PLASMA MODIFICATION

**DESIGNATION OF DOMESTIC REPRESENTATIVE and
APPOINTMENT OF POWER OF ATTORNEY**

The University of Durham, assignee of the patent application identified above, hereby
appoints:

Sanford E. Warren, Jr., Reg. No. 33,219

Kelly K. Kordzik, Reg. No. 36,571

Edward Mickelson, Reg. No. 50,413

Edwin E. Richards, II, Reg. No. 53,514

R. Scott Rhoades, Reg. No. 44,300

Melissa Schwaller, Reg. No. 46,089

all of the firm of Winstead Sechrest & Minick, P.C., my attorneys with full power of substitution
and revocation, to prosecute this registration, and to transact all business in the United States
Patent and Trademark Office connected therewith, and as my Domestic Representative upon

Express Mail Label
No. EV 507 271 545 US

whom may be served notices or process in proceedings affecting this application, and to receive any and all papers, correspondence and notices relating thereto.

Please direct all correspondence to:

Sanford E. Warren, Esq.
WINSTEAD SECHREST & MINICK P.C.
P.O. Box 50784
Dallas, Texas 75250-0784
United States of America

and direct all telephone calls to Raymond D. Norton at 214.745.5737 and all facsimile communications to (214) 745-5390. Please refer to Attorney Docket No. 42965-P041US.

UNIVERSITY OF DURHAM

By: X P. Lubacz X

Dated: 2 JUNE 2005

Printed: MS. P. LUBACZ

Title: TREASURER